

## WHAT IS CLAIMED IS:

1. An insulating member for a carbon brush holder, said insulating member comprising:

5           a main body made of thermosetting material, said main body having a first end and a second end at two ends thereof and a through hole running said first and second ends, said through hole having a first section abutting said first end for receiving a copper member, and a second section abutting said first section and said second end, said second section having an internal thread formed around its periphery, said internal  
10   thread having a spiral internal thread tooth, said internal thread tooth having a first internal tooth bevel facing said first end and a second internal tooth bevel facing said second end, said first internal tooth bevel having a larger distance between a peak and a bottom of said internal thread tooth than that of said second internal tooth bevel, said second internal tooth bevel having a first convexity abutting said first internal tooth  
15   bevel; and

          a cover member having an external thread formed around its external periphery for fitting said internal thread of said main body to enable said cover member to be threadedly mounted into said second section of said main body.

20           2. The insulating member as defined in claim 1, wherein said cover member comprises a top side and a bottom side, said cover member being threadedly connected with said main body by said bottom side facing said second end of said main body; said external thread of said cover member is formed of a spiral external thread tooth having a first external tooth bevel facing said top side of said cover member, and a second  
25   external tooth bevel facing said bottom side of said cover member, said first external

tooth bevel having a larger distance between a peak and a bottom of said external thread tooth than that of said second external tooth bevel, said second external tooth bevel having a second convexity abutting said first external tooth bevel.

5           3. The insulating member as defined in claim 1, wherein said cover member comprises a top side and a bottom side, said cover member being threadedly connected with said main body by said bottom side facing said second end of said main body; said external thread of said cover member is formed of a spiral external thread tooth having a first external tooth bevel facing said top side of said cover member, and a second  
10 external tooth bevel facing said bottom side of said cover member, an imaginary extended plane of said first external tooth bevel intersecting with an imaginary long axle running through a center of said cover member for an alpha angle, an imaginary extended plane of said second external tooth bevel intersecting with the imaginary long axle of said cover member for a beta angle, said alpha angle being smaller than said beta  
15 angle, said second external tooth bevel having a second convexity abutting said first external tooth bevel.

          4. The insulating member as defined in claim 1, wherein said cover member comprises a top side and a bottom side, said cover member being threadedly connected  
20 with said main body by said bottom side facing said second end of said main body; said external thread of said cover member is formed of a spiral external thread tooth having a first external tooth bevel facing said top side of said cover member, and a second external tooth bevel facing said bottom side of said cover member, said first external tooth bevel having a larger distance between a peak and a bottom of said external thread  
25 tooth than that of said second external tooth bevel, said second external tooth bevel

having a second concavity recessed therefrom towards said first external tooth bevel.

5. The insulating member as defined in claim 1, wherein said cover member comprises a top side and a bottom side, said cover member being threadedly connected  
5 with said main body by said bottom side facing said second end of said main body; said external thread of said cover member is formed of a spiral external thread tooth having a first external tooth bevel facing said top side of said cover member, and a second external tooth bevel facing said bottom side of said cover member, an imaginary extended plane of said first external tooth bevel intersecting with an imaginary long axle  
10 running through a center of said cover member for an alpha angle, an imaginary extended plane of said second external tooth bevel intersecting with the imaginary long axle of said cover member for a beta angle, said alpha angle being smaller than said beta angle, said second external tooth bevel having a second concavity recessed therefrom towards said first external tooth bevel.

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6. An insulating member for a carbon brush holder, said insulating member comprising:

a main body made of thermosetting material, said main body having a first end and a second end at two ends thereof and a through hole running said first and second  
20 ends, said through hole having a first section abutting said first end for receiving a copper member, and a second section abutting said first section and said second end, said second section having an internal thread formed around its periphery, said internal thread having a spiral internal thread tooth, said internal thread tooth having a first internal tooth bevel facing said first end and a second internal tooth bevel facing said  
25 second end, an imaginary extended plane of said first internal tooth bevel intersecting

with an imaginary long axle running through a center of said main body for a gamma angle, an imaginary extended plane of said second internal tooth bevel intersecting with the imaginary long axle of said cover member for a delta angle, said gamma angle being smaller than said delta angle, said second internal tooth bevel having a first convexity

5 abutting said first internal tooth bevel; and

a cover member having an external thread formed around its external periphery for fitting said internal thread of said main body to enable said cover member to be threadedly mounted into said second section of said main body.

10 7. The insulating member as defined in claim 6, wherein said cover member comprises a top side and a bottom side, said cover member being threadedly connected with said main body by said bottom side facing said second end of said main body; said external thread of said cover member is formed of a spiral external thread tooth having a first external tooth bevel facing said top side of said cover member, and a second  
15 external tooth bevel facing said bottom side of said cover member, said first external tooth bevel having a larger distance between a peak and a bottom of said external thread tooth than that of said second external tooth bevel, said second external tooth bevel having a second convexity abutting said first external tooth bevel.

20 8. The insulating member as defined in claim 6, wherein said cover member comprises a top side and a bottom side, said cover member being threadedly connected with said main body by said bottom side facing said second end of said main body; said external thread of said cover member is formed of a spiral external thread tooth having a first external tooth bevel facing said top side of said cover member, and a second  
25 external tooth bevel facing said bottom side of said cover member, an imaginary

extended plane of said first external tooth bevel intersecting with an imaginary long axle running through a center of said cover member for an alpha angle, an imaginary extended plane of said second external tooth bevel intersecting with the imaginary long axle of said cover member for a beta angle, said alpha angle being smaller than said beta angle, said second external tooth bevel having a second convexity abutting said first external tooth bevel.

9. The insulating member as defined in claim 6, wherein said cover member comprises a top side and a bottom side, said cover member being threadedly connected with said main body by said bottom side facing said second end of said main body; said external thread of said cover member is formed of a spiral external thread tooth having a first external tooth bevel facing said top side of said cover member, and a second external tooth bevel facing said bottom side of said cover member, said first external tooth bevel having a larger distance between a peak and a bottom of said external thread tooth than that of said second external tooth bevel, said second external tooth bevel having a second concavity recessed therefrom towards said first external tooth bevel.

10. The insulating member as defined in claim 6, wherein said cover member comprises a top side and a bottom side, said cover member being threadedly connected with said main body by said bottom side facing said second end of said main body; said external thread of said cover member is formed of a spiral external thread tooth having a first external tooth bevel facing said top side of said cover member, and a second external tooth bevel facing said bottom side of said cover member, an imaginary extended plane of said first external tooth bevel intersecting with an imaginary long axle running through a center of said cover member for an alpha angle, an imaginary

extended plane of said second external tooth bevel intersecting with the imaginary long axle of said cover member for a beta angle, said alpha angle being smaller than said beta angle, said second external tooth bevel having a second concavity recessed therefrom towards said first external tooth bevel.

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11. An insulating member for a carbon brush holder, said insulating member comprising:

a main body made of thermosetting material, said main body having a first end and a second end at two ends thereof and a through hole running said first and second  
10 ends, said through hole having a first section abutting said first end for receiving a copper member, and a second section abutting said first section and said second end, said second section having an internal thread formed around its periphery, said internal thread having a spiral internal thread tooth, said internal thread tooth having a first internal tooth bevel facing said first end and a second internal tooth bevel facing said  
15 second end, said first internal tooth bevel having a larger distance between a peak and a bottom of said internal thread tooth than that of said second internal tooth bevel, said second internal tooth bevel having a first concavity recessed therefrom towards said first internal tooth bevel; and

a cover member having an external thread formed around its external periphery  
20 for fitting said internal thread of said main body to enable said cover member to be threadedly mounted into said second section of said main body.

12. The insulating member as defined in claim 11, wherein said cover member comprises a top side and a bottom side, said cover member being threadedly connected  
25 with said main body by said bottom side facing said second end of said main body; said

external thread of said cover member is formed of a spiral external thread tooth having a first external tooth bevel facing said top side of said cover member, and a second external tooth bevel facing said bottom side of said cover member, said first external tooth bevel having a larger distance between a peak and a bottom of said external thread tooth than that of said second external tooth bevel, said second external tooth bevel having a second convexity abutting said first external tooth bevel.

13. The insulating member as defined in claim 11, wherein said cover member comprises a top side and a bottom side, said cover member being threadedly connected with said main body by said bottom side facing said second end of said main body; said external thread of said cover member is formed of a spiral external thread tooth having a first external tooth bevel facing said top side of said cover member, and a second external tooth bevel facing said bottom side of said cover member, an imaginary extended plane of said first external tooth bevel intersecting with an imaginary long axle running through a center of said cover member for an alpha angle, an imaginary extended plane of said second external tooth bevel intersecting with the imaginary long axle of said cover member for a beta angle, said alpha angle being smaller than said beta angle, said second external tooth bevel having a second convexity abutting said first external tooth bevel.

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14. The insulating member as defined in claim 11, wherein said cover member comprises a top side and a bottom side, said cover member being threadedly connected with said main body by said bottom side facing said second end of said main body; said external thread of said cover member is formed of a spiral external thread tooth having a first external tooth bevel facing said top side of said cover member, and a second

external tooth bevel facing said bottom side of said cover member, said first external tooth bevel having a larger distance between a peak and a bottom of said external thread tooth than that of said second external tooth bevel, said second external tooth bevel having a second concavity recessed therefrom towards said first external tooth bevel.

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15. The insulating member as defined in claim 11, wherein said cover member comprises a top side and a bottom side, said cover member being threadedly connected with said main body by said bottom side facing said second end of said main body; said external thread of said cover member is formed of a spiral external thread tooth having a  
10 first external tooth bevel facing said top side of said cover member, and a second external tooth bevel facing said bottom side of said cover member, an imaginary extended plane of said first external tooth bevel intersecting with an imaginary long axle running through a center of said cover member for an alpha angle, an imaginary extended plane of said second external tooth bevel intersecting with the imaginary long  
15 axle of said cover member for a beta angle, said alpha angle being smaller than said beta angle, said second external tooth bevel having a second concavity recessed therefrom towards said first external tooth bevel.

16. An insulating member for a carbon brush holder, said insulating member  
20 comprising:

a main body made of thermosetting material, said main body having a first end and a second end at two ends thereof and a through hole running said first and second ends, said through hole having a first section abutting said first end for receiving a copper member, and a second section abutting said first section and said second end,  
25 said second section having an internal thread formed around its periphery, said internal



thread having a spiral internal thread tooth, said internal thread tooth having a first internal tooth bevel facing said first end and a second internal tooth bevel facing said second end, an imaginary extended plane of said first internal tooth bevel intersecting with an imaginary long axle running through a center of said main body for a gamma angle, an imaginary extended plane of said second internal tooth bevel intersecting with the imaginary long axle of said cover member for a delta angle, said gamma angle being smaller than said delta angle, said second internal tooth bevel having a first concavity recessed therefrom towards said first internal tooth bevel; and

a cover member having an external thread formed around its external periphery for fitting said internal thread of said main body to enable said cover member to be threadedly mounted into said second section of said main body.

17. The insulating member as defined in claim 16, wherein said cover member comprises a top side and a bottom side, said cover member being threadedly connected with said main body by said bottom side facing said second end of said main body; said external thread of said cover member is formed of a spiral external thread tooth having a first external tooth bevel facing said top side of said cover member, and a second external tooth bevel facing said bottom side of said cover member, said first external tooth bevel having a larger distance between a peak and a bottom of said external thread tooth than that of said second external tooth bevel, said second external tooth bevel having a second convexity abutting said first external tooth bevel.

18. The insulating member as defined in claim 16, wherein said cover member comprises a top side and a bottom side, said cover member being threadedly connected with said main body by said bottom side facing said second end of said main body; said

external thread of said cover member is formed of a spiral external thread tooth having a first external tooth bevel facing said top side of said cover member, and a second external tooth bevel facing said bottom side of said cover member, an imaginary extended plane of said first external tooth bevel intersecting with an imaginary long axle running through a center of said cover member for an alpha angle, an imaginary extended plane of said second external tooth bevel intersecting with the imaginary long axle of said cover member for a beta angle, said alpha angle being smaller than said beta angle, said second external tooth bevel having a second convexity abutting said first external tooth bevel.

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19. The insulating member as defined in claim 16, wherein said cover member comprises a top side and a bottom side, said cover member being threadedly connected with said main body by said bottom side facing said second end of said main body; said external thread of said cover member is formed of a spiral external thread tooth having a first external tooth bevel facing said top side of said cover member, and a second external tooth bevel facing said bottom side of said cover member, said first external tooth bevel having a larger distance between a peak and a bottom of said external thread tooth than that of said second external tooth bevel, said second external tooth bevel having a second concavity recessed therefrom towards said first external tooth bevel.

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20. The insulating member as defined in claim 16, wherein said cover member comprises a top side and a bottom side, said cover member being threadedly connected with said main body by said bottom side facing said second end of said main body; said external thread of said cover member is formed of a spiral external thread tooth having a first external tooth bevel facing said top side of said cover member, and a second

external tooth bevel facing said bottom side of said cover member, an imaginary extended plane of said first external tooth bevel intersecting with an imaginary long axle running through a center of said cover member for an alpha angle, an imaginary extended plane of said second external tooth bevel intersecting with the imaginary long  
5 axle of said cover member for a beta angle, said alpha angle being smaller than said beta angle, said second external tooth bevel having a second concavity recessed therefrom towards said first external tooth bevel.